Appln. No.: 10/521,923 PC10480US

Amendment Dated July 11, 2006

Reply to Office Action of April 20, 2006

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.-23. (Cancelled).

24. (Currently Amended) Master cylinder for a hydraulic brake system with at least one [[on]] pressure chamber provided in a housing of the master cylinder and at least one housing bore for accommodating [[the]] a pressure fluid reservoir, a valve with a closing element being provided which due to a pressure difference prevailing between the pressure chamber and the pressure fluid reservoir can be moved into an opening position or a closing position, the valve in its opening position allowing a pressure fluid flow from the pressure fluid reservoir into the pressure chamber and in its closing position throttling or preventing a pressure fluid flow in the opposite direction to the pressure fluid flow from the pressure chamber into the pressure fluid reservoir,

wherein means are provided which maintain the closing element in the opening position when it is acted upon by a closing pressure difference due to an evacuation for the purpose of vacuum filling of the brake system, and allow the closing element to move in the closing position when the brake is actuated.

25. (Previously Presented) Master cylinder according to claim 24,

wherein the valve is provided with a first abutment element arranged in the reservoir bore for supporting the closing element in the closing position, the closing element being arranged in a moveable manner between the abutment element and a bottom of the reservoir bore and the abutment element being provided with a circumferential sealing bead on the bottom side facing the closing element which is arranged in such a way that a radially outer area of an upper side of the closing element in its opening position abuts on the sealing bead in a sealing manner.

26. (Previously Presented) Master cylinder according to claim 25,

wherein the closing element is formed as a disc and provided with webs formed towards the bottom of the reservoir bore, the webs abutting on the bottom in the opening position and quaranteeing the pressure fluid flow from the pressure fluid reservoir into the pressure chamber.

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27. (Previously Presented) Master cylinder according to claim 25,

wherein the closing element is formed as a disc and provided with webs on its circumference, which in the opening position allow an abutment of the disc on a circumferential shoulder of the reservoir bore and guarantee the pressure fluid flow from the pressure fluid reservoir into the pressure chamber.

28. (Previously Presented) Master cylinder according to claim 25,

wherein the valve in its closing position opens when a certain pressure difference is reached allowing the unthrottled pressure fluid flow from the pressure chamber into the pressure fluid reservoir.

29. (Previously Presented) Master cylinder according to claim 28,

wherein the abutment element on its bottom side is provided with projections which serve as fulcrum for the closing body in the closing position when the pressure difference is reached which opens the valve, the closing element deflecting and the radially outer area of the upper side of the closing element detaching from the sealing bead allowing the unthrottled pressure fluid flow from the pressure chamber into the pressure fluid reservoir.

30. (Previously Presented) Master cylinder according to claim 29,

wherein the valve is provided with a second abutment element with channels following the first abutment element in the reservoir bore towards the bottom, the second abutment element serving for supporting the closing element in its opening position.

31. (Previously Presented) Master cylinder according to claim 24,

wherein an adhesive maintains the closing element in its opening position during the evacuation of the brake system, the adhesive dissolving on contact with the pressure fluid during the vacuum filling.

- 32. (Previously Presented) Master cylinder according to claim 24,
- wherein a clamping element maintains the closing element in its opening position during the evacuation of the brake system, where the clamping element detaches when the system is filled with pressure fluid under vacuum.
- 33. (Previously Presented) Master cylinder according to claim 25,

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wherein a sleeve-type tensioning element is provided in the first abutment element projecting during the evacuation of the brake system from the first abutment element towards the closing element in such a manner that it maintains the closing element in its opening position, a pressure difference caused by the first actuation of the brake and closing the valve moving the closing element into its closing position, the closing element pushing back the tensioning element into the first abutment element so that a movement of the closing element

34. (Previously Presented) Master cylinder according to claim 24, wherein the closing element is provided with circumferential locking elements which

into the closing position is possible when the brake is actuated.

during the evacuation of the system maintain the closing element in the opening position by means of a mechanical locking which is detachable when the pressure fluid is filled in during the

filling under vacuum.

35. (Previously Presented) Master cylinder according to claim 30,

wherein the material of the closing body and the abutment elements is chosen in such a way that a magnetic field acting from the outside during the evacuation of the brake system maintains the closing element in its opening position.

36. (Previously Presented) Master cylinder according to claim 24,

wherein during the evacuation of the brake system a weight is fastened at the closing element which maintains the closing element in its opening position, the material of which is chosen in such a way that the weight is nearly neutralized in the pressure fluid when the brake is actuated.

37. (Currently Amended) Method for filling a brake system under vacuum, in particular by using a master cylinder according to claim 24[[,]] comprising the steps of:

<u>generating</u> a magnetic field generated outside of the master cylinder[[,]] during [[the]] <u>an</u> evacuation of the brake system; <u>and</u>

<u>maintaining</u> the closing element of the valve in its opening position <u>with the</u> <u>magnetic field</u> thus allowing an unhindered air flow from the pressure chamber into the pressure fluid reservoir and thus allowing a venting of the brake system.

38. (Previously Presented) Master cylinder according to claim 28, wherein the valve is provided with a throttled pressure fluid connection allowing a

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throttled pressure fluid flow from the pressure chamber into the pressure fluid reservoir when the closing element is in its closing position.

39. (Previously Presented) Master cylinder according to claim 38, wherein the valve is inserted in a connection area between the master cylinder and the pressure fluid reservoir.

- 40. (Previously Presented) Master cylinder according to claim 39, wherein the valve is arranged in a connecting socket of the pressure fluid reservoir.
- 41. (Previously Presented) Master cylinder according to claim 38, wherein the master cylinder is provided with a central valve and a supply bore and that the valve is inserted in a connecting path between the central valve or the supply bore and the pressure fluid reservoir.
- 42. (Previously Presented) Master cylinder according to claim 38, wherein the master cylinder is provided with a central valve or a supply bore and that the valve is inserted in a connecting path between the central valve or the supply bore and the pressure fluid reservoir.
- 43. (Currently Amended) Master A master cylinder according to claim 38, for a hydraulic brake system with at least one pressure chamber provided in a housing of the master cylinder and at least one housing bore for accommodating a pressure fluid reservoir, a valve with a closing element being provided which due to a pressure difference prevailing between the pressure chamber and the pressure fluid reservoir can be moved into an opening position or a closing position, the valve in its opening position allowing a pressure fluid flow from the pressure fluid reservoir into the pressure chamber and in its closing position throttling or preventing a pressure fluid flow in the opposite direction to the pressure fluid flow from the pressure chamber into the pressure fluid reservoir,

wherein means are provided which maintain the closing element in the opening position when it is acted upon by a closing pressure difference due to an evacuation for the purpose of vacuum filling of the brake system, and allow the closing element to move in the closing position when the brake is actuated,

wherein the valve in its closing position opens when a certain pressure difference is reached allowing the unthrottled pressure fluid flow from the pressure chamber into the

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pressure fluid reservoir,

wherein the valve is provided with a throttled pressure fluid connection allowing a throttled pressure fluid flow from the pressure chamber into the pressure fluid reservoir when the closing element is in its closing position, and

wherein the valve is provided with a valve housing in which a valve seat is mounted which can be displaced in longitudinal direction and that a second channel can be connected by means of the valve seat.

- 44. (Previously Presented) Master cylinder according to claim 43, wherein the valve seat restricts at least in part the throttled pressure fluid connection.
- 45. (Currently Amended) Master A master cylinder according to claim 38, for a hydraulic brake system with at least one pressure chamber provided in a housing of the master cylinder and at least one housing bore for accommodating a pressure fluid reservoir, a valve with a closing element being provided which due to a pressure difference prevailing between the pressure chamber and the pressure fluid reservoir can be moved into an opening position or a closing position, the valve in its opening position allowing a pressure fluid flow from the pressure fluid reservoir into the pressure chamber and in its closing position throttling or preventing a pressure fluid flow in the opposite direction to the pressure fluid flow from the pressure chamber into the pressure fluid reservoir,

wherein means are provided which maintain the closing element in the opening position when it is acted upon by a closing pressure difference due to an evacuation for the purpose of vacuum filling of the brake system, and allow the closing element to move in the closing position when the brake is actuated,

wherein the valve in its closing position opens when a certain pressure difference is reached allowing the unthrottled pressure fluid flow from the pressure chamber into the pressure fluid reservoir,

wherein the valve is provided with a throttled pressure fluid connection allowing a throttled pressure fluid flow from the pressure chamber into the pressure fluid reservoir when the closing element is in its closing position, and

wherein the valve includes a valve body, a sealing element with a sealing lip and a leaf spring, the sealing lip allowing the pressure fluid flow from the pressure fluid reservoir into the pressure chamber and the leaf spring allowing the pressure fluid flow in the opposite direction when a certain pressure difference is reached.

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46. (Currently Amended) Master A master cylinder according to claim 38, for a hydraulic brake system with at least one pressure chamber provided in a housing of the master cylinder and at least one housing bore for accommodating a pressure fluid reservoir, a valve with a closing element being provided which due to a pressure difference prevailing between the pressure chamber and the pressure fluid reservoir can be moved into an opening position or a closing position, the valve in its opening position allowing a pressure fluid flow from the pressure fluid reservoir into the pressure chamber and in its closing position throttling or preventing a pressure fluid flow in the opposite direction to the pressure fluid flow from the pressure chamber into the pressure fluid reservoir,

wherein means are provided which maintain the closing element in the opening position when it is acted upon by a closing pressure difference due to an evacuation for the purpose of vacuum filling of the brake system, and allow the closing element to move in the closing position when the brake is actuated,

wherein the valve in its closing position opens when a certain pressure difference is reached allowing the unthrottled pressure fluid flow from the pressure chamber into the pressure fluid reservoir,

wherein the valve is provided with a throttled pressure fluid connection allowing a throttled pressure fluid flow from the pressure chamber into the pressure fluid reservoir when the closing element is in its closing position, and

wherein the valve includes a valve body and a sealing element with two sealing lips, the first sealing lip allowing the pressure fluid flow from the pressure fluid reservoir into the pressure chamber and the second sealing lip allowing the pressure fluid flow in the opposite direction when a certain pressure difference is reached.

- 47. (Previously Presented) Master cylinder according to claim 45, wherein the valve body is provided with a permeable membrane which allows the throttled pressure fluid flow from the pressure chamber into the pressure fluid reservoir.
- 48. (Previously Presented) Master cylinder according to claim 46, wherein the valve body is provided with a permeable membrane which allows the throttled pressure fluid flow from the pressure chamber into the pressure fluid reservoir.